

Alcatel-Lucent Advanced Troubleshooting

Course Outline

The Alcatel-Lucent Advanced Troubleshooting course begins with a review of basic software and hardware characteristics, including environmental factors. The course then addresses troubleshooting methodologies and tools including database management, event logs, password recovery and packet analysis. Lab exercises will introduce problems at Layers 1, 2 and 3, which students must solve. Troubleshooting network problems involving multiprotocol label switching (MPLS) and services is a key component in the course.

CREDIT TOWARD CERTIFICATION

- Alcatel-Lucent Service Routing Architect

DURATION

5 days (classroom hours and in-depth lab training)

RECOMMENDED PREREQUISITES

10 courses:

- Alcatel-Lucent Scalable IP Networks
- Alcatel-Lucent Interior Routing Protocols and High Availability
- Alcatel-Lucent Border Gateway Protocol
- Alcatel-Lucent Multiprotocol Label Switching
- Alcatel-Lucent Services Architecture
- Alcatel-Lucent Virtual Private LAN Services
- Alcatel-Lucent Virtual Private Routed Networks
- Alcatel-Lucent Quality of Service
- Alcatel-Lucent Multicast Protocols
- Alcatel-Lucent Triple Play Services

EXAM NAME

Alcatel-Lucent Advanced Troubleshooting (4A0-110)

PREREQUISITE EXAMS

- Alcatel-Lucent Scalable IP Networks (4A0-100)
- Alcatel-Lucent Interior Routing Protocols and High Availability (4A0-101)
- Alcatel-Lucent Border Gateway Protocol (4A0-102)
- Alcatel-Lucent Multiprotocol Label Switching (4A0-103)
- Alcatel-Lucent Services Architecture (4A0-104)
- Alcatel-Lucent Virtual Private LAN Services (4A0-105)
- Alcatel-Lucent Virtual Private Routed Networks (4A0-106)
- Alcatel-Lucent Quality of Service (4A0-107)
- Alcatel-Lucent Multicast Protocols (4A0-108)
- Alcatel-Lucent Triple Play Services (4A0-109)

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COURSE OBJECTIVES

After completing the course, students should be able to:

- Demonstrate a basic overall understanding of how to implement software upgrades
- Detail how to recover a software image
- Diagnose hardware failures and isolate the problem
- Understand the environmental factors that affect network equipment
- Control the databases supporting network equipment
- Examine event logs and diagnose problems
- Change default alarm settings for management policies
- Perform password recovery
- Demonstrate the ability to perform packet analysis with use of command line interface (CLI) commands
- Understand the pros and cons of debug commands and how best to use them
- Identify and isolate Layer 1 networking problems
- Identify and fix Layer 2 networking problems
- Solve issues related to spanning tree, encapsulation, and maximum transmission unit (MTU) sizes
- Diagnose and repair Layer 3 network routing problems
- Solve Layer 2 and Layer 3 virtual private network (VPN) problems
- Diagnose and repair MPLS problems

COURSE MODULES

- Module 1 Software and Hardware Upgrades
- Module 2 Troubleshooting Methodology
- Module 3 Layer 1 Troubleshooting
- Module 4 Layer 2 Troubleshooting
- Module 5 Layer 3 Troubleshooting
- Module 6 Troubleshooting MPLS
- Module 7 Troubleshooting Services

WHO SHOULD ATTEND

- Service provider and non-service provider customers
- Channel partners and resellers
- Employees

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